

**SODM Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8491b****Specification**

---

**SODM Antibody - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P04179</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1, $\kappa$
Calculated MW	24750

**SODM Antibody - Additional Information****Gene ID** 6648**Other Names**

Superoxide dismutase [Mn], mitochondrial, SOD2

**Target/Specificity**

This SODM antibody is generated from a mouse immunized with a recombinant protein of human SODM.

**Dilution**

WB~~1:2000

IHC-P~~1:25

FC~~1:25

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SODM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**SODM Antibody - Protein Information****Name** SOD2

**Function** Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.

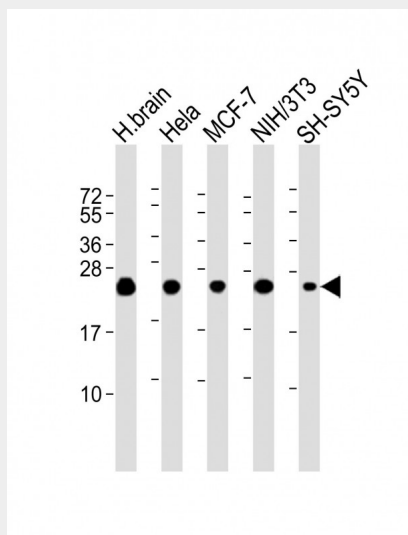
**Cellular Location**  
Mitochondrion matrix.

### SODM Antibody - Protocols

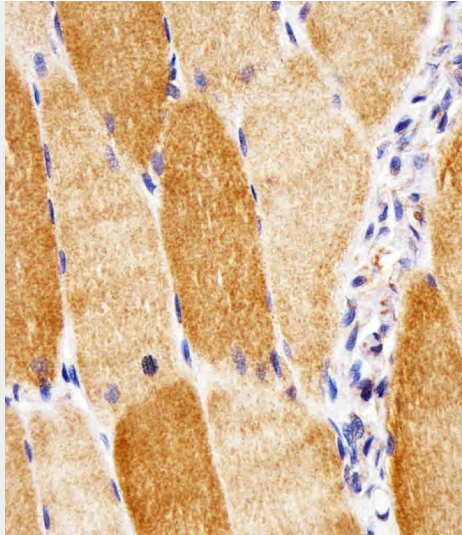
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### SODM Antibody - Images



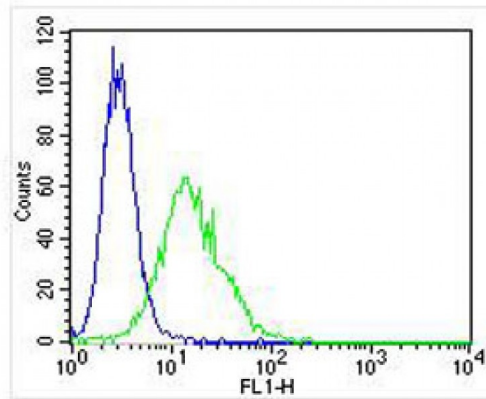
All lanes : Anti-SODM Antibody at 1:2000 dilution Lane 1: human brain lysate Lane 2: HeLa whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lane 5: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AM8491b staining SODM in human skeletal muscle sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AM8491b staining SODM in human brain sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing A549 cells stained with AM8491b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8491b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (NA168821) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse IgG1 (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

### **SODM Antibody - Background**

Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.

### **SODM Antibody - References**

- Wispe J.R., et al. Biochim. Biophys. Acta 994:30-36(1989).
- Beck Y., et al. Nucleic Acids Res. 15:9076-9076(1987).
- Heckl K., et al. Nucleic Acids Res. 16:6224-6224(1988).
- Ho Y.-S., et al. FEBS Lett. 229:256-260(1988).
- Church S.L., et al. Biochim. Biophys. Acta 1087:250-252(1990).